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FEDERAL COMMUNICATIONS COMMISSION
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Before the
Federal Communications Commission
Washington, D.C. 20554

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In the Matter of	)	
	)	
The Provision of Interstate and	)	
International Interexchange	)	
Telecommunications Service Via The	)	
"Internet" By Non-Tariffed, Uncertificated	)	RM No. 8775
Entities	)	
	)	
America's Carriers Telecommunication	)	
Association	)	
	)	
Petition for Declaratory Ruling, Special	)	
Relief, and Institution of Rulemaking	)	

JOINT REPLY COMMENTS OF NETSCAPE COMMUNICATIONS CORPORATION AND VOXWARE, INC.

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SUMMARY

The overwhelming majority of comments clearly demonstrate that the Commission does not have jurisdiction over Internet telephone software manufacturers and thus should reject ACTA's Petition. While the jurisdictional question is clear, the Commission should nonetheless grapple with the fundamental issue of whether, if at all, to regulate Internet voice communications. The record in this proceeding provides substantial and uncontradicted evidence that FCC regulation of Internet telephony would be technically unenforceable, inconsistent with the Telecommunications Act of 1966, and poor public policy These uncontested facts satisfy all of the elements for both mandatory forbearance from Title II regulation of Internet telephony services and preemption of state regulation of the Internet.

The Commission should not accept the invitation, proposed by several telecommunications providers, that it use the ACTA Petition as a forum for eliminating the ESP exemption from switched access charges. This argument not only ignores the Internet's significant cost efficiencies relative to circuit-switched networks, but would apply an overbroad "solution" to the narrow issue of Internet voice communications. Rather than forcing the procedurally improper issue of access charges into this proceeding, the Commission should instead initiate a comprehensive rulemaking on access charge reform, allowing all interested parties a fair opportunity to participate. Moreover, before considering changes to its long-standing exemption of ESPs from access charges, the Commission must first rationalize access charges—bringing access charges down to a cost-based level and creating an explicit, nondiscriminatory universal service support system.

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JOINT REPLY COMMENTS OF NETSCAPE COMMUNICATIONS CORPORATION AND VOXWARE, INC.

Netscape Communications Corporation ("Netscape") and Voxware, Inc. ("Voxware"),[1] by their attorneys and pursuant to Section 1.405(b) of the Commission's Rules, 47 C.F.R. § 1.405(b), hereby submit these joint reply comments on the petition of America's Carriers Telecommunication Association ("ACTA") seeking FCC regulation of Internet telephony software manufacturers.[2]

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[1] InSoft, Inc. (http://www.insoft.com), which joined the opening comments of Netscape (http:/home.netscape.com) and Voxware (http://www.voxware.com), is now a wholly owned subsidiary of Netscape. *See* Joint Opposition of Netscape Communications Corporation, Voxware, Inc. and InSoft, Inc. RM No. 8775, at 6 n.9 ("Netscape/Voxware Opposition") (http://www.technologylaw.com/techlaw/acta_comm.html).

[2] *The Provision of Interstate and International Interexchange Telecommunications Service Via the "Internet" By Non-Tariffed, Uncertificated Entities*, Petition for Declaratory Ruling, Special Relief and Institution of Rulemaking, RM No. 8775 (filed March 4, 1996)("Petition"). The Common Carrier Bureau established a consolidated pleading cycle for all of ACTA's requests and extended the deadline for filing reply comments until June 10, 1996. Rep. No. CC 96-10, DA 96-414 (March 25, 1996).

INTRODUCTION

The ACTA Petition's basic claim—that the Commission has the authority to regulate manufacturers of Internet telephony software as Title II common carriers—is totally without merit. As the Netscape/Voxware Opposition demonstrated, and as confirmed by virtually all other commenters, the Commission simply does not enjoy statutory jurisdiction over software manufacturers. Because Internet software manufacturers are not "telecommunications carriers," on this basis alone ACTA's Petition should be dismissed.

Yet the FCC should go beyond ACTA's superficial attack on Internet telephony software to confront the underlying issue presented by the Petition. That long-term question—how, if at all, the FCC should regulate communications services delivered via the Internet, including Internet voice and video services ("IVVS")—drew a strong outpouring of concern by corporate, private and governmental parties. Recognizing the public policy dangers inherent in premature regulation of the revolutionary medium of the Internet, the vast majority of comments, ranging from NTIA and NSF to trade groups and to most local and long-distance telecommunications carriers, urge the Commission to continue to treat Internet communications as "enhanced" services not subject to the regulatory obligations imposed on basic telecommunications services.

The Netscape/Voxware Opposition proposed that the Commission act affirmatively on the ACTA Petition by forbearing from Title II regulation of Internet telephony services and by preempting state regulation of the Internet. While few of the parties expressly addressed either forbearance or preemption, most of the commenters recognized the key legal and policy bases supporting both the Commission's traditional de-

regulatory approach to enhanced services and the mandatory forbearance provisions of the Telecommunications Act of 1996 ("1996 Act")[3]. For example, several of the parties corroborated the Netscape/Voxware arguments on the technical infeasibility of regulating IVVS, the benefit to consumers in having a competitive choice in meeting their communication needs, the impossibility of jurisdictionally separating Internet communications between interstate and intrastate usage, and the nondominant status of Internet telephone services.

These uncontradicted facts provide the policy and legal justification for application of forbearance and preemption of state Internet regulation. Thus, the Commission has before it an ample record demonstrating that it should, and must under the 1996 Act, forbear and preempt regulation of IVVS. Indeed, it is imperative that the Commission confront the issue of Title II regulation of Internet communications in this proceeding. If the FCC opts for the easier course of dismissing ACTA's Petition on the narrow ground that ACTA has sought relief only against Internet software manufacturers, and does not establish a clear "non-regulation" policy for Internet communications in this docket, it will undoubtedly face similar petitions in the near future intended to frustrate the competitive development of Internet communication applications. Repetitious regulatory examination of Internet issues will unnecessarily encumber the smaller, entrepreneurial software companies that have fueled the Internet's dramatic increase in scope and functionality, including Internet voice capabilities, and who clearly do not

[3] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996)(to be codified at 47 U.S.C. § 151 *et seq.*). References to the 1996 Act will, for clarity, be to the sections of the Communications Act of 1934 as amended by the Act.

have the resources to match established telecommunications firms in drawn-out regulatory wrangling. The end result will be a wasted opportunity, harm to consumers and a chilling effect on the growth of the Internet as a broadband communications medium.

The local exchange carriers ("LECs") and several interexchange carriers ("IXCs") invite the Commission to use the ACTA Petition as a forum for eliminating the enhanced service provider ("ESP") exemption from access charge obligations. In an effort to force their own agenda, these commenters contend that Internet Service Providers ("ISPs") and Online Service Providers ("OSPs") should pay access charges and contribute to universal service support mechanisms to mitigate what they contend are uneconomic "arbitrage" opportunities artificially created by the regulatory anomalies.

As demonstrated below, this argument represents a fundamental misunderstanding of the architecture and nature of Internet communications, which in many ways makes the Internet a far more economically efficient medium for communication. Equally important, however it would be procedurally improper for the Commission to address access charge reform in the context of ACTA's Petition to regulate Internet software manufacturers. The FCC has an obligation to give fair notice of such a radical departure from the access charge policies it has consistently applied to enhanced services since 1983. Even if this issue were properly noticed, moreover, elimination of the ESP exemption is premature until the Commission rationalizes access charges by delinking access from universal service—thus bringing access charges down to a cost-based level and creating an explicit, nondiscriminatory universal service support system. For these reasons, the FCC should defer any decision on the ESP access charge ex-

emption until a Notice of Proposed Rulemaking on access charge reform is released and a complete and comprehensive record can be compiled.

DISCUSSION

ACTA is virtually the only party to assert that the Commission should regulate Internet telephony services under Title II. Moreover, the comments unanimously joined Netscape and Voxware in rejecting ACTA's claim that Internet telephone software manufacturers are subject to regulation as common carriers.[4]

> ACTA contends that because manufacturers of Internet telephony software
>
> do not offer their packages of software, access and calling capability for free, but for a fee, they are engaged in the offering of communications services for hire and have embraced the mantle of 'common carrier' under the established definition; therefore, they must be regulated as such.

ACTA Comments at 18. To the contrary, it is widely understood that the FCC has no jurisdiction over computer software manufacturers or any communications-related software provider. As the comments recognized, to be a telecommunications carrier under the 1996 Act, an entity must offer "telecommunications service." Notwithstanding ACTA's claim, none of the Internet telephony software firms named in the Petition offers any telecommunications services, let alone Internet "access" or transport functions.

Internet telephony software manufacturers do not carry communications of any sort, and do not provide either "telecommunications" or "telecommunications services"

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[4] *See, e.g.*, Netscape Comments at 19-22; ITAA Comments at 3-6; CPSR Comments at 9-11; Sprint Comments at 3; BSA Comments at 6-8; Pacific Bell & Nevada Bell Comments at 4-5; Millin Publishing Comments at 2-5; NTCA Comments at 2; Compuserve Comments at 6-8. Citations to the opening comments in this proceeding will follow the convention of "[Party] Comments at ___."

under the 1996 Act. As the Information Technology Industry Council ("ITI") commented, "Internet software publishers and Internet service providers are not telecommunications carriers because they do not offer telecommunications services. Instead, Internet software publishers sell software ('access software') that enables computers with Internet access to use data packets to carry voice transmissions."[5] Nothing in the record supports ACTA's claim for FCC jurisdiction over software manufacturers.

It is irrelevant that Internet telephony software offers voice communications "capability." As Netscape and Voxware observed, software that *enables* communication is itself not a telecommunications service for Communications Act purposes. If that were the case, a variety of manufacturers of software used in circuit-switched telephone networks, including switch manufacturers such as Nortel and Siemens, would suddenly—and for the first time—be deemed "carriers."[6] And even if Internet telephony software is properly classified as Customer Premises Equipment ("CPE"), as the VON Coalition points out CPE providers are unregulated under *Computer II,* CPE is detariffed, and state regulation of CPE has been preempted by the FCC.[7] Accordingly, on this basis alone the Commission should reject the ACTA Petition claim that Internet software manufacturers are common carriers.

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[5] ITI Comments at 5.
[6] Netscape/Voxware Opposition at 20.
[7] VON Coalition Opposition at 17-18; Netscape/Voxware Opposition at 20 n.27, 29 n.47.

I. THE VAST MAJORITY OF PARTIES SUPPORT THE PRINCIPLES UNDERLYING THE "FORBEAR" AND "PREEMPT" APPROACH TO INTERNET TELEPHONY ADVOCATED BY NETSCAPE AND VOXWARE

While rejection of ACTA's contention that the Commission enjoys jurisdiction over Internet software manufacturers is required, the Commission should grapple with the fundamental issue of whether, if at all, to regulate Internet voice communications. Addressing this issue head-on in this proceeding is necessary to avoid efforts to constrain the development of Internet communications through repeated requests for imposition of protectionist and anticompetitive regulatory burdens on the Internet. In short, "despite the fact that ACTA's Petition gives the wrong answers, the Commission should resolve the questions surrounding Internet voice and video services" in order to eliminate the regulatory uncertainty that now jeopardizes continued development of new and innovative Internet-based telecommunications services.[8]

A. FCC Regulation of Internet Communications Services Would be Ill-Conceived and Counter-Productive

The record in this proceeding provides substantial and uncontradicted evidence that FCC regulation of Internet telephony would be unenforceable, inconsistent with the 1996 Act and poor public policy.

Many of the parties joined Netscape and Voxware in recognizing that regulation of Internet voice communications would be impossible because of the technical and policy difficulties associated with segregating and measuring IVVS.[9] The Commission's Title II regulations were designed for the traditional public switched telephone network

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[8] Netscape/Voxware Opposition at 7.

[9] Netscape/Voxware Opposition at 16-19; *accord*, VON Coalition Comments at 10-12; CPSR Comments at 12-14; New Media Coalition Comments at 13, 15; Third Planet and Freetel Comments at 8-9; Sprint Comments at 3.

("PSTN"); they cannot simply be "ported" to the dramatically different architecture and routing protocols of the Internet. The network architectures of the Internet and the PSTN are so fundamentally different that trying to superimpose traditional common carrier regulation on the Internet would be like forcing the proverbial square peg into a round hole. It just does not fit.

For instance, it is impossible to identify any single carrier of Internet voice transmissions.[10] Unlike the traditional circuit-switched telephone network, there is no one entity that owns or controls the Internet's "network of networks." The Internet transmits voice and other communications by routing unidentifiable packets of data across a matrix of networks. These routing functions make it technically and economically impossible to segregate Internet "voice" data from other Internet communications, to apply a measured rate to the transmission of packets, or even to measure the "length" of an Internet voice call.[11] For these and related reasons, the National Science Foundation ("NSF")—an agency with a long and critical history in the development, administration and evolution of the Internet—concluded that Internet telephony "is a user-provisioned capability [that] *is clearly not a service provided by a common carrier or other central entity capable of regulation in the sense sought by ACTA.*"[12]

Even if regulation of Internet telephony were technically feasible, the costs of monitoring and metering Internet telephony usage would be extraordinary. The technical capability for this type of surveillance does not yet exist, and its creation—

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[10] Netscape/Voxware Opposition at 16.
[11] Netscape/Voxware Opposition at 16-17; NSF Comments at 2.
[12] *Id.* (emphasis supplied).

solely to satisfy an artificial regulatory mandate—would necessitate huge, uneconomic investment in unnecessary Internet "overhead" functions.[13] Furthermore, as the New Media Coalition noted, "monitoring of the Internet to achieve a method for regulating a digitized voice transmission surcharge would cause the Commission to become the world's largest surveillance agency, monitoring the content of millions of data transmissions."[14] This type of aggressive surveillance of content would not only invite a tidal wave of constitutional challenges, but cause a significant drain on the Commission's limited budgetary resources.

Rather than constricting the development of IVVS by imposing antiquated regulatory constraints and an "Orwellian surveillance" of content, the Commission should recognize the public interest benefits associated with an Internet environment unfettered by regulation. By providing an alternative to circuit-switched telephone networks for voice and video communications, IVVS offers consumers a competitive choice in meeting their telecommunications needs. Internet telephony is a perfect example of the type of intermodal competition from a new (and in many ways more efficient) network architecture that the Commission should promote. Indeed, IVVS offers consumers a range of multimedia and real-time applications that go far beyond placing telephone calls via the Internet.

These innovative applications are a direct result of the Commission's "hands-off" approach to the Internet.[15] As the 1996 Act affirms, that policy has allowed the Internet

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[13] Netscape/Voxware Opposition at 17.

[14] New Media Coalition Comments at 13.

[15] As Commissioner Chong recently testified to the House Subcommittee on Telecommunications, the Internet has been successful because "government has kept its mitts off." *See* "Fields Cautions FCC on Telecom Act Enforcement," *Communications Daily*, March 28, 1996, at 2.

to "flourish, to the benefit of all Americans," and should be continued.[16] The record on the ACTA Petition demonstrates that shackling Internet communication with regulation is not only technologically impractical, but would represent poor public policy. These public interest benefits themselves provide ample public policy justification for adopting a "non-regulatory" approach to Internet telecommunications.

B. The Technological and Public Interest Record Compiled on the ACTA Petition Demonstrates that the Commission Should Apply Its Forbearance Policy to and Preempt State Regulation of Internet Telephony

Netscape and Voxware advocated a forbearance and preemption approach to regulation of Internet communications, under which the Commission would forbear from Title II regulation of Internet telecommunications and preempt state economic regulation of the Internet. Although none of the parties directly addressed forbearance, virtually all of the commenters recognized that FCC regulation of Internet communications would contradict sound public policy. They very reasons why FCC regulation of IVVS is poor policy satisfy all of the elements for both mandatory forbearance under the 1996 Act and the Commission's settled policy of treating Internet communications as unregulated enhanced services.[17]

Since *Computer I* in 1971, the Commission has consistently applied a deregulatory approach to "enhanced" services[18] in order to promote the unfettered growth and evo-

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[16] 47 U.S.C. § 230(a)(4).

[17] Netscape/Voxware Opposition at 14-15.

[18] Enhanced services are those that employ computer processing applications on the content, code or protocol of data or which involve subscriber interaction with computer databases. 47 C.F.R. § 64.702(a).

lution of innovative and competitive information service technologies and media.[19] One of these innovative information services is IVVS. As NTIA explained:

> The services that now involve the Internet are more likely to be "enhanced," or information services over which the Commission has disclaimed jurisdiction under the Communications Act. The Commission decision in the 1980s not to regulate enhanced services was a wise one that has conferred substantial benefits on American consumers.

NTIA Comments at 2. The results of the Commission's unregulated treatment of enhanced services has been an unparalleled success, launching the United States into a global leadership position in computer-related information service applications. Many of the parties in this proceeding expressed the legitimate and very serious concern that imposition of an antiquated regulatory structure on such a vibrant technological success will snuff out future innovations and deny consumers the benefits of technological advances.

The 1996 Act essentially codifies the FCC's *Computer II* paradigm. Even if Internet telephony is properly classified as a "telecommunications service" rather than an enhanced service, however, the Netscape/Voxware Opposition demonstrated that the Commission is legally obligated under the 1996 Act to forbear from applying Title II regulation to IVVS. The comments in this docket fully support this approach by providing a clear record basis on all three of the elements of mandatory forbearance under Section 10 of the 1996 Act.[20]

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[19] *Computer II Final Decision*, 77 F.C.C.2d 384, 422-23 ¶ ¶100-01 (1980) (*"Computer II"*).

[20] Section 10 of the Act, added by the 1996 Act, requires the Commission to forbear from applying any regulation to a service or provider, or class of services or providers, where (a) it is not necessary to ensure that charges and practices are just, reasonable and non-discriminatory, (b) enforcement of the regulation is not necessary to protect consumers, and (c) forbearance is consistent with the public interest. 47 U.S.C. § 10(a)(1)-(3).

First, because Internet telephony provides consumers with an advanced, competitive choice for meeting their telecommunications needs—and because it is undisputed that Internet telephony services as a class, and no single "provider" of these services, enjoys market power—IVVS is inherently "just and reasonable."[21] Second, regulation of IVVS is not necessary to protect consumers. Rather, a competitive choice among communications media will directly benefit consumers, who can always return to traditional interstate long-distance carriers if Internet providers engage in unreasonable practices or pricing.[22] Finally, given the innovation and growth of the Internet as a communications mechanism forbearance is manifestly in the public interest.[23] As NTIA cautioned:

> The Commission should not risk stifling the growth and use of this vibrant technology in order to prevent some undemonstrated harm to long distance service providers. If Internet-based services eventually develop to an extent that raises concerns about harm to consumers or the public interest, the Commission would have ample time to more fully address the issue. Now is not the time.

NTIA Comments at 2.

Thus, the record establishes that forbearance from common carrier regulation of Internet telephony is required under the 1996 Act. The Commission has a long-standing forbearance policy toward "nondominant" carriers of interstate interexchange serv-

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[21] 47 U.S.C. § 10(a)(1). Since the ability to engage in unjust and unreasonable behavior turns on the existence of market power, Internet telephony is preemptively just and reasonable *See, e.g., Policy and Rules Concerning Rates for Competitive Common Carrier Services and Facilities Authorizations Therefor*, First Report and Order, 85 F.C.C.2d 1 (1980).

[22] 47 U.S.C. § 10(a)(2). NTIA recognizes this principle in its Comments. The Internet "creates a growing number of opportunities for consumers to identify new communication and information needs and to meet those needs. NTIA Comments at 2.

[23] 47 U.S.C. § 10(a)(3).

ices, including AT&T,[24] and has proposed to reinstate that policy now that the Supreme Court's narrow interpretation of its Communications Act forbearance authority has been overruled by Congress. Internet communications services should be subject to the same forbearance policy afforded the IXCs. Notwithstanding the argument by a handful of IXCs who call for elimination of the ESP exemption in order to create a "level playing field,"[25] it would be the ultimate competitive inequality to apply Title II regulations to one class of nondominant carriers—IVVS "providers"—while forbearing from regulating all other nondominant interchange carriers. There is no conceivable legal or policy justification for imposing Title II regulation on Internet IVVS when the Commission is simultaneously prepared to forbear from regulation of the entire interstate long distance marketplace.

Preemption of state regulation should also be an integral part of Commission policy on the Internet. State economic regulation of the Internet and Internet communications services would necessarily conflict with both the Commission's long-standing policy toward unregulated enhanced services and the 1996 Act's directive that the Internet should remain "unfettered" by state and federal regulation.[26] Once again, the record in this proceeding completely supports the legal and technical bases for preemption of state regulation.[27]

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[24] *Motion of AT&T to be Reclassified as a Non-Dominant Carrier*, FCC 94-247 (released Oct. 23, 1995).

[25] AT&T Comments at 4; Sprint Comments at 4; LDDS Comments at 15.

[26] State efforts to regulate Internet content (for instance, obscenity) or to tax Internet communications, would raise different considerations, including the First Amendment and the Interstate Commerce Clause.

[27] Netscape/Voxware Opposition at 29-35; BSA Comments at 10; Vocaltalk/Quarterdeck Comments at 17.

As a legal matter, preemption of state regulation is required in light of the national policy created by the 1996 Act on Internet regulation. The Act established that "[i]t is the policy of the United States to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, *unfettered by Federal or State regulation*." 47 U.S.C. § 30 (b)(2) (emphasis supplied). Thus, as BSA explained, "Congress expresses a clear intent that the FCC and the State commissions refrain from regulating Internet and interactive computer services, including software."[28]

Preemption of state regulation has long been permitted under the Communications Act where "jurisdictional separation" of usage is not possible and where state regulation would conflict with a uniform national policy. On a technical basis, the record is clear that identification and measurement of Internet communications services is practically impossible. As noted above, there is no identifiable "carrier" of IVVS, and telephony traffic cannot be segregated from other Internet communication traffic. "[E]ven if it were practical to identify Internet voice communications among the hundreds of millions of Internet packets flowing across the network each day, separation of voice 'calls' along traditional telephone jurisdictional lines is definitely impossible."[29] The Commission has not hesitated to preempt state regulation in a wide variety of similar circumstance—from pay-per-call preambles to CPE detariffing to paging services and others[30]—where state regulation would conflict with federal commun-

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[28] BSA Comments at 10.

[29] Netscape/Voxware Opposition at 32-33.

[30] *Policies and Rules Concerning Interstate 900 Telecommunications Services*, 6 FCC Rcd. 6166, 6180-81 (1991)(pay-per-call preambles); *Detariffing the Installation and Maintenance of Inside Wiring*, 7 FCC Rcd. 1334, 1335 (1992)(inside wiring); *Petition for Declaratory Order Filed by BellSouth Corporation*, 7 FCC Rcd.

(Footnote continued on next page)

ications policy. Here, preemption of state Internet regulation is fully consistent with (indeed required by) the national "non-regulation" policy toward the Internet declared by the 1996 Act.[31]

Preemption of state Internet regulation is also needed to ensure that the Internet itself, a national resource, is not encumbered by repetitious—and unnecessary—state regulatory proceedings. The tremendous growth and development of the Internet, including dramatic technical advances like the World Wide Web and Internet telephony, has by and large been the product of a number of small, entrepreneurial software companies. Today's Internet marketplace allows new entry and national exposure with virtually no capital requirements, thus ensuring that this vibrant pace of technological progress will continue. If Internet communications become the subject of repetitious regulatory proceedings in multiple state jurisdictions—as now appears very likely—there is little question that the financial and legal requirements for Internet-based companies will increase geometrically and the torrid pace of American technological progress on the Internet will be slowed unnecessarily.

1619, 1622-23 (1992)(voicemail); *Amendment of the Commission's Rules Relative to Allocation of the 849-851/894-896 Mhz Bands*, 5 FCC Rcd. 3861, 3864-65 (1991)(airphone calls in interstate flights); *Illinois Bell v. FCC*, 883 F.2d 104 (D.C. Cir. 1989)(Centrex sales agency requirements); *Public Serv. Comm'n of Maryland v. FCC*, 909 F.2d 1510 (D.C. Cir. 1990)(disconnection services).

[31] The Commission can also effectively preempt state regulation of Internet telecommunications services by classifying Internet services as "interstate" for jurisdictional purposes. *See* 47 C.F.R. § 36.154(a). The Internet is an inherently interstate, global medium, and virtually all Internet communications, even to e-mail the person next door, are interstate. Netscape/Voxware Opposition at 30-32.

II. THE COMMISSION SHOULD DEFER CONSIDERATION OF WHETHER TO ASSESS ACCESS CHARGES ON ESPs UNTIL IT RATIONALIZES THE UNIVERSAL SERVICE SUPPORT SYSTEM AND COMPLETES ACCESS CHARGE REFORM

While recognizing the absence of Commission jurisdiction over software manufacturers, the LECs[32] and a small number of the IXCs[33] used the ACTA Petition as a vehicle to further their agenda on access charges by urging an elimination of the ESP exemption from access charge obligations. Attempts by telecom providers to force ISPs and OSPs to pay access charges represents a slightly more sophisticated version of the regulatory protectionism requested by ACTA. The traditional telephone providers are not seeking an outright ban on Internet IVVS, and do not support ACTA's call for an FCC definition of "permissible" Internet communications, but nonetheless propose a sharp departure from long-standing Commission access charge policies in order to impose new regulatory costs on Internet telephony and avoid the long-term competitive threat posed by Internet communications services.[34] Although more polished than ACTA's blatant plea for regulatory protection from competition, these proposals are based on incorrect factual assumptions and are vastly premature.

A. The Efficiencies Associated with Internet Telephony are Independent of the ESP Access Charge Exemption

The LECs and IXCs claim that Internet telephony is economically viable only because the ESPs providing access to the Internet are exempt from access charges, thus

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[32] US WEST Comments at 3; Southwestern Bell Comments at 8; Pacific Bell & Nevada Bell Comments at 8-9; USTA Comments at 3.

[33] LDDS/Worldcom Comments at 15; Sprint Comments at 4-5. AT&T was more restrained, calling for access charge reform as a general matter. AT&T Comments at 5-7. MCI did not file comments on the ACTA Petition.

[34] "ACTA's complaint is a cynical complaint by an industry which fears the loss of business. It is the dinosaur complaining about the emergence of mammals ." CPSR Comments at 4.

allowing the effective "price" of Internet voice communications to be held below circuit-switched long distance rates.[35] The telecom providers' claim that Internet telephony is nothing more than the arbitrage of access charge exempt transport is wrong.[36] The argument is based on the incorrect assumption that for Internet telephony, ISPs and OSPs offer "identical long distance service" and make equivalent use of the network.[37]

That is not the case. Internet telephony and PSTN telephony are radically different. What the LECs and IXCs fail to recognize is that the Internet's robust, decentralized packet-switched architecture creates unique network efficiencies that cannot be realized on circuit-switched networks. Unlike the PSTN, where a voice communication requires a switched connection (duplex voice path) between users, the Internet is a "connectionless" protocol, thus allowing many users to share the same facilities and bandwidth simultaneously. The Internet's packet-switching architecture allows real-time, dynamic routing of data and data compression that necessitate far less relative routing and transport capacity than is required for circuit-switched telephony. Furthermore, data compression and low bandwidth transport enable a reasonable quality of service for voice on the Internet, where network capital costs can be offset against a wide range of non-voice applications.

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[35] Pacific Bell and Nevada Bell Comments at 8 ("ESP exemption .... actually creates the unfair competition that concerns ACTA"); USTA Comments at 3; Southwestern Bell Comments at 6 (prices for Internet telephony "are artificially low because of the improper use of the ESP exemption from access charges"); US WEST Comments at 2-3.

[36] According to Sprint:

> [i]f all telecommunications carriers were able to obtain access at cost-based levels, arbitrage opportunities... would evaporate to a large degree and probably disappear entirely. Service providers would have no regulation-induced financial incentive to use the Internet to provide basic voice service, nor would they have an access charge-related advantage over IXCs in the provision of basic common carrier services.

Sprint Comments at 4.

[37] USTA Comments at 3.

These capabilities makes Internet telephony fundamentally cheaper than traditional telephony, quite without regard to access charges. Indeed, much of the higher "cost" of public switched telephony is in the infrastructure and high incremental expenses associated with generating, storing and reconciling billing records, a "settlements" process that is completely alien to the Internet model. Whether or not the intrinsic efficiencies of Internet communications can withstand the geometric growth in Internet volumes remains an open question. But it is clear that as an economic matter, Internet and PSTN telephony are not identical or even equivalent mediums of long-distance service.

Moreover, as the comments reveal, IVVS is still in a relatively embryonic stage with a limited market of end users.[38] Given the novelty of the communications capability, IVVS suffers from relatively inferior quality of service and reliability. To complete an IVVS communication, the two end users must, at the very least, have the same software and be online at the same time. Even Sprint recognizes that "[u]se of the Internet to place telephone calls today appears to be a relatively minor problem."[39] While these technological issues will likely be overcome in relatively short order, they preclude any wholesale application of PSTN access charges to the markedly different nature of Internet voice telephony.

Repeal of the ESP access charge exemption would also represent an overbroad solution to any arbitrage "problem" that may exist. First, it is clear that the huge bulk of

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[38] CPSR Comments at 6.

[39] Sprint Comments at 5 ("[G]iven the relatively poor quality of Internet voice connections and the constraints faced by Internet telephone callers, Sprint believes that the volume of such traffic today is quite small").

OSP/ISP services are ordinary enhanced services, and that Internet telephony is now and will likely remain for some time a tiny fraction of Internet volume. Applying switched access charges as a "remedy" for Internet telephony would be "overkill." Second, access charges are simply inapplicable to a large portion of the Internet. Switched access charges (local transport, local switching and common transport) recover the costs associated with use of the LEC network for the origination and termination of interstate communications. A large proportion of Internet subscribers, however, do not use these facilities. Corporate "Intranet" and intranetwork services,[40] government agencies and educational institutions generally rely on dedicated connections to the Internet backbone, rather than "dial-up" IP access methods that make use of the PSTN for reaching the Internet. Thus, a large segment of Internet traffic, that not carried by ISPs and OSPs, does not touch the PSTN and should not be required to bear the burden of cost recovery for these facilities.

In sum, traditional telephony and IVVS are distinct in their technical, architectural and economic features. The argument that the viability of Internet voice communications is an artificial byproduct of the ESP exemption ignores the Internet's significant cost efficiencies relative to circuit-switched networks. And whether or not access charges are related to the underlying economics of Internet telephony, repealing

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[40] Intranets are internal corporate networks that utilize the Internet's TCP/IP protocol to enable companies to employ the same types of servers and browsers used for the World Wide Web for internal applications distributed over corporate local area networks ("LANs") as are available on the wider Internet. *See Intranets Redefine Corporate Information Systems* (http://home.netscape.com/comprod/at_work/white_paper/indepth.html).

the ESP exemption would be an overbroad solution to the narrow issue of Internet voice communications.

B. The FCC Should Not Initiate or Address Access Charge Reform in the Context of ACTA's Petition to Regulate Internet Software Manufacturers

Several of the traditional telephone companies suggest that the Commission should use ACTA's Petition as the forum for "immediately" eliminating the ESP exemption and addressing access charge reform.[41] Any recommendation to sidestep the established procedural process for instituting such a wide-reaching and drastic shift in Commission policy should be rejected. The ESP access charge exemption has existed since 1983, and reversal of this policy must be supported in law and fact.[42] The record in this proceeding does not provide that support.

ACTA's Petition is limited to seeking FCC imposition of common carrier regulation on Internet communications services. This declaratory ruling proceeding does not provide sufficient notice for Commission reconsideration of the ESP exemption. ACTA's Petition barely mentions access charges, does not propose repeal of the ESP exemption, and thus did not draw the broad participation that this issue would otherwise receive in an FCC-initiated NPRM. Because ACTA's Petition did not provide notice of a potential reversal of FCC policy on enhance service access charges, it would be unfair and procedurally improper for the Commission address the issue in this proceeding.

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[41] SWBT Comments at 2 ("The Commission could solve the price disparity immediately either by eliminating the ESP exemption or by enforcing its rules against ESPs that provide interstate telecommunications services without paying applicable access charges"); Pacific Bell & Nevada Bell Comments at 16 ("the Commission should consider ACTA's Petition in the broader context of the need to remove the ESP exemption from interstate access charges"); Sprint Comments at 4; LDDS/WorldCom Comments at 15.

[42] *Motor Vehicle Manufacturers Assoc. v. State Farm Mutual Auto Ins. Co.*, 463 U.S. 29 (1983).

Furthermore, before the Commission can adopt a wholesale approach to repealing the ESP exemption, it must first carefully consider how and when to implement such a new access charge regime. Imposing access charge obligations on ESPs will have a serious impact of the financial structure of the rapidly growing and competitive OSP and ISP industries, including numerous local providers and entrepreneurial ventures. The Commission should be sensitive to the cost dislocations that such a ruling would cause. This issue deserves deliberate and careful planning—not the "flash cut" immediate change proposed by at least some of the LECs.

Rather than forcing the issue of access reform in this proceeding, the Commission should instead initiate a more comprehensive rulemaking on access charge reform, in which all interested parties can participate and provide a complete record. By issuing a broader access charge reform NPRM, which the Commission's schedule for 1996 indicates is forthcoming, the Commission would avoid any procedural objection and give fair notice to the ISP and OSP industries. To their credit, some of LECs propose that, as an alternative to lifting the ESP exemption in this proceeding, the Commission should initiate such a broader access reform docket.[43] That is the appropriate way for the Commission to determine whether their claim as to Internet telephony access charge "arbitrage" has any validity.

[43] USTA Comments at 3 ("USTA agrees that a rulemaking proceeding to consider access charge reform is imperative and that such a proceeding should include a review of the changing use of the network and the ESP exemption"); Pacific Bell & Nevada Bell Comments at 16 ("The Commission should begin a rulemaking to remove or phase-out the ESP exemption").

C. Eliminating the ESP Exemption Before Access Charges are Rationalized Would Be Premature

Eliminating the ESP access charge exemption before access charge reform is completed would be premature for a different reason. It is widely recognized in the telecommunications industry that access reform is needed. Access charges are not cost-based but were originally designed—and still serve—to a large degree as an implicit, internal subsidy mechanism for the LECs. Because they are not cost-based, access charges create pricing inefficiencies and competitive distortions in the telecommunications industry. In order to foster an effectively competitive interstate market, the Commission must rationalize access charges by de-linking access from universal service—thus bringing access charges down to a cost-based level and creating an explicit, non-discriminatory universal service support system.[44]

There is little question that the Commission's access charge regulations must be modified in order to bring access charges into line with real economic costs. As Sprint explained:

> There is no dispute that interstate access charges are far above economic cost. Removing access subsidies—in particular, eliminating the carrier common line charge and the residual interconnection charge—to push access rates to cost is a crucial step to the development of competition in the interexchange, exchange access, and local markets. . . .

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[44] *See generallly* Comments of Netscape Comunications Corporation, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45 (filed April 12, 1996)(http://www.technologylaw.com/techlaw/us_comm.html). As the Common Carrier Bureau's February 1996 Staff Report on universal service recognizes, "in many cases, [these] implicit support mechanisms were not created pursuant to a specific regulatory directive, but rather were the result of pricing and cost-allocation practices that arose in the prior monopoly service environment, and may not be sustainable in a competitive market." *Preparation for Addressing Universal Service Issues: A Review of Current Interstate Support Mechanisms*, Common Carrier Bureau (Feb. 23, 1996) (http://www.fcc.gov/Bureaus/CommonCarrier/Reports/univserv.txt).